Please replace the claims with the following amended version of the claims:

B1

1. (currently amended) An isolated nucleic acid encoding a G-protein coupled receptor polypeptide, the nucleic acid encoding a polypeptide comprising at least 25 contiguous amino acids of SEQ ID NO:2. [comprising greater than 70% amino acid identity to an amino acid sequence of SEQ ID NO:6, SEQ ID NO:4, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, or SEQ ID NO:16.]

2. (currently amended) The [an] isolated nucleic acid of claim 1, wherein the nucleic acid encodes a polypeptide comprising at least 50 contiguous amino acids of SEQ ID NO:2. [greater than 80% amino acid identity to an amino acid sequence of SEQ ID NO:6, SEQ ID NO:4, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, or SEQ ID NO:16.]

3. (currently amended) The [an] isolated nucleic acid of claim 1, wherein the nucleic acid encodes a polypeptide comprising at least 100 contiguous amino acids of SEQ ID NO:2. [greater than 90% amino acid identity to an amino acid sequence of SEQ ID NO:6, SEQ ID NO:4, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, or SEQ ID NO:16.]

4. (cancelled)

5. (original) The isolated nucleic acid of claim 1, wherein the nucleic acid encodes a polypeptide that has G-protein coupled receptor activity.

B2

6. (currently amended) The isolated nucleic acid of claim 1, wherein the nucleic acid encodes a polypeptide comprising an amino acid sequence of SEQ ID NO:2. [SEQ ID NO:6, SEQ ID NO:4, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, or SEQ ID NO:16.]

B2 cont.

7. (currently amended) The isolated nucleic acid of claim 1, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:1. [SEQ ID NO:5, SEQ ID NO:3, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, or SEQ ID NO:15.]

8-12 (cancelled)

B3

13. (currently amended) An isolated nucleic acid encoding a G-protein coupled receptor polypeptide, wherein the nucleic acid encodes a polypeptide comprising greater than 90% amino acid identity to an amino acid sequence of SEQ ID NO:2[ or SEQ ID NO:14].

14. (cancelled)

15. (original) The isolated nucleic acid of claim 13, wherein the nucleic acid encodes a polypeptide that has G-protein coupled receptor activity.

B4

16. (currently amended) The isolated nucleic acid of claim 13, wherein the nucleic acid encodes a polypeptide comprising an amino acid sequence of SEQ ID NO:2[ or SEQ ID NO:14].

17. (currently amended) The isolated nucleic acid of claim 13, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:1[ or SEQ ID NO:13].

18. (currently amended) An isolated nucleic acid encoding a G-protein coupled receptor polypeptide, the polypeptide encoded by the nucleic acid comprising greater than about 90% amino acid identity to a polypeptide having an amino acid sequence of SEQ ID NO:2[ or SEQ ID NO:14], wherein the nucleic acid selectively

B4 cont

hybridizes under [moderately] stringent hybridization conditions to a nucleotide sequence of SEQ ID NO:1 [or SEQ ID NO:13].

19-24. (cancelled)

25. (original) An isolated G-protein coupled receptor polypeptide, the polypeptide comprising greater than about 90% amino acid sequence identity to an amino acid sequence of SEQ ID NO:2 or SEQ ID NO:14.

26. (original) The isolated polypeptide of claim 25, wherein the polypeptide specifically binds to polyclonal antibodies generated against SEQ ID NO:2 or SEQ ID NO:14.

27. (original) The isolated polypeptide of claim 25, wherein the polypeptide has G-protein coupled receptor activity.

28. (original) The isolated polypeptide of claim 25, wherein the polypeptide has an amino acid sequence of SEQ ID NO:2 or SEQ ID NO:14.

29. (original) An antibody that selectively binds to the polypeptide of claim 19, or 25.

B5

30. (currently amended) An expression vector comprising the nucleic acid of claim 1, 13, [11,] or 18 [13].

31. (original) A host cell transfected with the vector of claim 30.

32-47 cancelled

48. (original) A method for identifying a compound that modulates signal transduction, the method comprising the steps of:

(i) contacting the compound with a polypeptide comprising greater than 90% amino acid sequence identity to the amino acid sequence of SEQ ID NO:2 or SEQ ID NO:14; and

(ii) determining the functional effect of the compound upon the polypeptide.

49. (original) The method of claim 48, wherein the polypeptide has G-protein coupled receptor activity.

50. (original) The method of claim 48, wherein the polypeptide is linked to a solid phase.

51. (original) The method of claim 48, wherein the functional effect is determined by measuring changes in intracellular cAMP, IP3, or Ca2+.

52. (original) The method of claim 48, wherein the functional effect is a chemical effect.

53. (original) The method of claim 48, wherein the functional effect is a physical effect.

54. (original) The method of claim 48, wherein the functional effect is determined by measuring binding of the compound to the polypeptide.

55. (original) The method of claim 48, wherein the polypeptide is recombinant.

56. (original) The method of claim 48, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:2 or SEQ ID NO:14.

57. (original) The method of claim 48, wherein the polypeptide is expressed in a cell or cell membrane.

58. (original) The method of claim 57, wherein the cell is a eukaryotic cell.

59. (original) The method of claim 58, wherein the cell is a kidney cell.

60. (original) A method of treating kidney disease, the method comprising the step of administering to a patient a therapeutically effective amount of a compound identified using the method of claim 48.

61. (original) A method of treating cerebral cavernous malformations, the method comprising the step of administering to a patient a therapeutically effective amount of a compound identified using the method of claim 48.

62-67 (cancelled)